

## United States Patent and Trademark Office

ENTTED STATES DEPARIMENT OF COMMERCE United States Patent and Trademark, Office Address: COMMISSIONER FOR PATENTS P.O. Bect. 1450 Alexandria, Virginia 72313-1450 1999; USPIG. 2007

APPLICATION NO.	PILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/052,295	01/18/2002	Behzad Mirzayi	12,339	8376	
75	90 11/25/2003		EXAMINER		
William W. H	aefliger	BARRY, CHESTER T			
Suite 512 201 So. Lake A	ve.		ART UNIT	PAPER NUMBER	
Pasadena, CA 91101			1724		

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

					- 6			
Office Action Summary		Applicatio	n No.	Applicant(s)	<del></del>			
		10/052,29	5	MIRZAYI ET AL.				
		Examiner		Art Unit				
		Chester T.		1724				
Period fo	The MAILING DATE of this communication Reply	on appears on the	cover sheet with the c	orrespondence address				
THE ! - Exter after - If the - If NO - Failu - Any /	ORTENED STATUTORY PERIOD FOR F MAILING DATE OF THIS COMMUNICAT misions of time may be available under the provisions of 37 (SIX (6) MONTHS from the mailing date of this communicat period for reply specified above is less than thirty (30) days period for reply is specified above, the maximum statutory re to reply within the set or extended period for reply will, by eply received by the Office later than three months after the dipatent term adjustment. See 37 CFR 1.704(b).	TON.  CFR 1.136(a). In no everon.  s, a reply within the stature period will apply and will a stature the application.	nt, however, may a reply be tim tory minimum of thirty (30) days I expire SIX (6) MONTHS from ication to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
1)	Responsive to communication(s) filed on	26 October 2003	<u>3</u> .					
2a) <u></u>	This action is <b>FINAL</b> . 2b)⊠	This action is no	n-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
5)□ 6)⊠ 7)□	<ul> <li>Claim(s) 1-12 is/are pending in the application.</li> <li>4a) Of the above claim(s) 1 and 3-12 is/are withdrawn from consideration.</li> <li>Claim(s) is/are allowed.</li> <li>Claim(s) 2 is/are rejected.</li> <li>Claim(s) is/are objected to.</li> <li>Claim(s) are subject to restriction and/or election requirement.</li> </ul>							
	ion Papers	and/or election re	дан оттопе.					
		ominor						
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on <u>18 January 2003</u> is/are: a) accepted or b) objected to by the Examiner.								
احدارت:	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (	ınder 35 U.S.C. §§ 119 and 120							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> <li>13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.</li> <li>37 CFR 1.78.</li> <li>a) The translation of the foreign language provisional application has been received.</li> <li>14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</li> </ul>								
Attachmen	• •							
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-94 nation Disclosure Statement(s) (PTO-1449) Paper N			(PTO-413) Paper No(s), attent Application (PTO-152)				

Application/Control Number: 10/052,295

Art Unit: 1724

Applicant's election of the "pellet" species of claim 2 is noted with appreciation.

Claim 2 is rejected under 35 USC Sec. 103(a) as obvious over Strudgeon and Miller.

USP 4237002 to Strdgeon describes a method of providing for a fluid treatment, that includes: providing a treatment zone containing granular activated charcoal; providing a stream of water containing nutrients, contaminant degrading microbes and dissolved oxygen; and introducing said stream to said treatment zone to effect adsorption said nutrients and microbes onto the granular activated charcoal, thereby to provide a contaminant treatment matrix, whereby contaminant in fluid flow through the matrix is reduced. Strudgeon refers to the granular activated carbon as "granules," not as pellets as required by the elected invention defined by claim 2.

USP 5863858 to Miller is directed to a method of making activated carbon. Miller teaches that in packed bed applications, regularly shaped carbon pellets are preferred over irregularly shaped granules in order to minimize pressure drop through the bed. It would have been obvious therefore, to the extent that Strudgeon does not inherently or otherwise explicitly describe use of granular activated carbon in pellet form, to have have used granular activated carbon in pellet form to reduce the pressure drop through Sturgeon's bed, as suggested by Miller.

Page 3

Art Unit: 1724

Abler teaches that activated carbon comes in a variety of physical forms, e.g., granules

or pellets (col 2 line 18).

Hanna teaches that it is well known that the use of granular activated carbon in pellet

form is "relatively common" in pollution control applications (col 1 line 22). Hanna is

also cited for its discussion of certain disadvantages of use of granular activated carbon

in pellet form (col 1 line 20 - 35).

CHESTER T. BARRY PRIMARY EXAMINER

703.306-5921